

Calendar No. 647

109TH CONGRESS }
2d Session }

SENATE

{ REPORT
109-353

DANA POINT DESALINATION PROJECT AUTHORIZATION ACT

SEPTEMBER 27, 2006.—Ordered to be printed

Mr. INHOFE, from the Committee on Environment and Public
Works, submitted the following

R E P O R T

[To accompany H.R. 3929]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred a bill (H.R. 3929) to amend the Water Desalination Act of 1996, to authorize the Secretary of the Interior to assist in research and development, environmental and feasibility studies, and preliminary engineering for the Municipal Water District of Orange County, California, Dana Point Desalination Project located at Dana Point, California, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

GENERAL STATEMENT AND BACKGROUND

The oceans account for approximately 97.4% of the world's water. Another 2% is locked up in ice caps and glaciers. Subtracting saline ground water and inland saline seas from the remainder, less than 0.5% of the Earth's water is directly suitable for human consumption, agricultural or industrial uses.¹ In recent years, desalination has increasingly been used to produce potable water from brackish groundwater and seawater to both improve the quality of fresh water for drinking and industrial uses, and to treat industrial wastewater prior to discharge and reuse. The use of desalination technologies for treating fresh, brackish, and contaminated water

¹<http://ncseonline.org/nle/crsreports/water/h2o-34.cfm>. Congressional Research Service. "Desalination R&D: The New Federal Program," February, 1999. Page 1-2. Original located in Congressional Research Service Archives.

supplies may continue to increase due to the increasing shortage of usable surface and groundwater supplies in many parts of the United States. While large-scale seawater desalination plants remain expensive, in recent years many coastal communities are moving toward desalting seawater to supplement freshwater supplies.

The Water Desalination Act of 1996 (Public Law 104–298) authorized an expanded United States research and development program to produce the most cost-effective and technologically efficient means by which usable water could be produced from saline water or water otherwise impaired or contaminated. Under the Act, the Secretary of Interior is authorized to award competitive grants and to enter into competitive contracts, based on annual appropriations, to conduct, encourage, and assist in the financing of research to develop processes for converting saline water into water suitable for beneficial uses.

H.R. 3929 amends the Water Desalination Act of 1996 to authorize up to \$2.5 million in federal funding to assist the Municipal Water District in Orange County in conducting preliminary engineering and environmental studies on the Dana Point Desalination Project. The Municipal Water District of Orange County provides wholesale water to 30 cities and retail water agencies in Orange County, California. Tremendous population growth combined with the limitation placed on current water supplies, primarily from the Colorado River and the Sacramento/San Joaquin Bay-Delta, have both been causal factors in the Water District's concerted look at desalination as a cost-effective option. If found feasible under Bureau of Reclamation standards and guidelines, the Dana Point Project would use a unique subsurface ocean intake system that would seek to reduce impacts on the environment, cut down on pretreatment costs related to desalination, and deliver between 15,000 and 20,000 acre-feet of water per year to Orange County water consumers.

It also authorizes \$500,000 for a comparative feasibility study for supplying potable water to Central and Southern Rhode Island through desalinization, conservation, development of additional water supplies and increased water use efficiency.

OBJECTIVES OF THE LEGISLATION

H.R. 3929 amends the Water Desalination Act of 1996 to authorize the Secretary of Interior to assist in research and development, environmental and feasibility studies, and preliminary engineering for the Municipal Water District of Orange County, California, Dana Point Desalination Project located at Dana Point, California.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

This Act may be cited as the “Dana Point Desalination Project Authorization Act.”

Section 2. Authorization for Dana Point Desalination Project

This section amends the Water Desalination Act of 1996 (P.L. 104–298) to authorize the Secretary of the Interior to assist the Municipal Water District of Orange County, California in research

and development, environmental and feasibility studies, and preliminary engineering for the Dana Point Desalination Project at Dana Point, California. This section reduces the maximum allowed federal cost of the project to 25 percent from the maximum of 50 percent under the Act; authorizes \$2.5 million to be appropriated to the Secretary to carry out this section; and includes a sunset provision of 10 years for the Secretary to carry out any provisions under this section.

Section 3. Authorization for Rhode Island desalination study

This section authorizes \$500,000 for the Secretary, working in coordination with the University of Rhode Island, the Rhode Island Water Resources Board, and a coalition of businesses and nonprofit organizations known as the Rhode Island Coalition for Water Security, to conduct a comparative study exploring options for supplying potable water to Central and Southern Rhode Island. The study assesses the cost-effectiveness and environmental impact of several options, including desalination, reduced nonessential use of potable water, wastewater reuse, increased water use efficiency, and development of additional ground and surface supplies. Currently, the central and southern portions of Rhode Island are experiencing a potable water supply shortage due to reduced water resources, aquifer limitations, and saltwater intrusion. This study is critical for developing a coherent and comprehensive policy for Rhode Island that takes into consideration desalination and other options for drinking water supply.

LEGISLATIVE HISTORY

On September 28, 2005, Representative Ken Calvert (R-CA) introduced H.R. 3929, which was cosponsored by Representatives Miller, Rohrabacher, and Royce. The bill was referred to the House Committee on Resources Subcommittee on Water and Power and the House Committee on Science. On October 5, 2005, the Subcommittee on Water and Power held a hearing on the bill. On December 12, 2005, H.R. 3929 was reported with an amendment and discharged, respectively, by the House Resources Committee and the House Science Committee. Under suspension of the rules, the House of Representatives approved H.R. 3929 on May 2, 2006 by voice vote. Upon receipt by the Senate, H.R. 3929 was received, read twice, and referred to the Senate Committee on Environment and Public Works. The Committee met on September 13, 2006, to consider the bill. H.R. 3929 was ordered favorably reported with amendment by voice vote.

HEARINGS

No Senate committee hearings were held on H.R. 3929.

ROLLCALL VOTES

The Committee on Environment and Public Works met to consider H.R. 3929, the Dana Point Desalination Project Authorization Act, on September 13, 2006. An amendment was offered by Senator Voinovich on behalf of Senator Chafee to add language authorizing a study for supplying potable water to Central and Southern Rhode Island. The amendment was approved by voice vote. H.R. 3929 was

ordered favorably reported by voice vote. No rollcall votes were taken.

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee makes evaluation of the regulatory impact of the reported bill.

The bill does not create any additional regulatory burdens, nor will it cause any adverse impact on the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104-4), the committee finds that H.R. 3929 would not impose Federal intergovernmental unfunded mandates on State, local, or tribal governments.

COST OF LEGISLATION

H.R. 3929—Dana Point Desalination Project Authorization Act

Summary: H.R. 3929 would authorize the Secretary of the Interior to assist the Municipal Water District of Orange County with research and development activities, environmental and feasibility studies, and preliminary engineering for a desalination plant in Dana Point, California. The act would authorize the appropriation of \$2.5 million for these activities. The authority would terminate within 10 years, and the federal share of the project's studies and initial engineering costs could not exceed 25 percent. In addition, the act would authorize the appropriation of \$500,000 for a feasibility study to assess the cost-effectiveness and environmental impact of different techniques for providing potable water to the state of Rhode Island.

Assuming appropriation of the authorized amount, CBO estimates that implementing H.R. 3929 would cost \$3 million over the 2007–2008 period. Enacting H.R. 3929 would not affect direct spending or revenues.

H.R. 3929 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA); the act would benefit the state of Rhode Island and Orange County, California, and any costs would be incurred voluntarily.

Estimated cost to the Federal Government: The estimated budgetary impact of H.R. 3929 is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and environment).

For this estimate, CBO assumes that H.R. 3929 will be enacted near the beginning of fiscal year 2007 and that the authorized amounts will be appropriated in fiscal year 2007. Based on historical spending patterns of similar projects, CBO estimates that implementing this act would cost \$3 million over the 2007–2008 period.

	By fiscal year, in millions of dollars—				
	2007	2008	2009	2010	2011
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Authorization Level	3	0	0	0	0
Estimated Outlays	2	1	0	0	0

Intergovernmental and private-sector impact: H.R. 3929 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments. The act would authorize funding for desalination activities that would benefit the state of Rhode Island and the water district in Orange County, California. Any costs incurred would be voluntary.

Previous CBO estimate: On November 30, 2005, CBO transmitted a cost estimate for H.R. 3929 as ordered reported by the House Committee on Resources on November 16, 2005. That version of the legislation did not include an authorization of appropriations for a potable water supply feasibility study for the state of Rhode Island. CBO's cost estimates reflect the different levels of authorized funding in the two versions of the legislation.

Estimate prepared by: Federal Costs: Julie Middleton. Impact on State, Local, and Tribal Governments: Lisa Ramirez-Branum. Impact on the Private Sector: Craig Cammarata.

Estimate approved by: Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

CHANGES IN EXISTING LAW

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows: Existing law proposed to be omitted is enclosed in black brackets, new matter is printed in *italic*, existing law in which no change is proposed is shown in roman:

WATER DESALINATION ACT OF 1996

* * * * *

SECTION 1. SHORT TITLE.

This Act may be cited as the “Water Desalination Act of 1996”.

SEC. 2. DEFINITIONS.

As used in this Act:

(1) * * *

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SEC. 9. CONSULTATION.

In carrying out the provisions of this Act, the Secretary shall consult with the heads of other Federal agencies, including the Secretary of the Army, which have experience in conducting desalination research or operating desalination facilities. The authorization provided for in this Act shall not prohibit other agencies from carrying out separately authorized programs for desalination research or operations.

SEC. 10. DANA POINT DESALINATION RESEARCH AND FEASIBILITY RELATED COSTS.

(a) *AUTHORITY.*—The Secretary may assist in research and development, environmental and feasibility studies, and preliminary engineering for the Municipal Water District of Orange County, California, Dana Point Desalination Project located at Dana Point, California.

(b) *FEDERAL SHARE.*—Notwithstanding section 7, the Federal share of the costs for the project assisted under subsection (a) shall not exceed 25 percent of the total costs of the project.

(c) *AUTHORIZATION OF APPROPRIATIONS.*—There is hereby authorized to be appropriated to the Secretary \$2,500,000 to carry out this section.

(d) *SUNSET.*—The authority of the Secretary to carry out any provisions of this section shall terminate 10 years after the date of the enactment of this section.

SEC. 11. FEASIBILITY STUDY FOR DESALINATION TO SUPPLY CENTRAL AND SOUTHERN RHODE ISLAND.

(a) *AUTHORITY.*—The Secretary, in coordination with the University of Rhode Island, the Rhode Island Coalition for Water Security, and the Rhode Island Water Resources Board, shall conduct a comparative study to assess the cost-effectiveness and the environmental impact of providing a potable water supply to central and southern Rhode Island by—

- (1) desalination;
- (2) reduced nonessential use of potable water;
- (3) wastewater reuse;
- (4) increased water use efficiency; and
- (5) development of additional ground and surface supplies.

(b) *AUTHORIZATION OF APPROPRIATIONS.*—There is authorized to be appropriated to the Secretary to carry out this section \$500,000.

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